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BULLETIN OF THE TASMANIAN FIELD NATURALISTS CLUB INC.

Nov 1997

Editor Andrew Walsh

Number 288

The Tasmanian Field Naturalists Club Inc. encourages the study of natural history and supports conservation. We issue our journal *The Tasmanian Naturalist* annually in October. People with a range of backgrounds and knowledge are welcome as members.

Contact Genevieve Gates (03 6227 8638) for further information, or write to GPO Box 68A Hobart 7001

PROGRAM

General meetings start at 7:45pm on the first Thursday of the month in the Life Sciences Building at the University of Tasmania. Outings are usually held the following weekend, meeting at 10am outside the Tasmanian Museum and Art Gallery entrance, Macquarie St. *If you are planning to attend an outing but not the meeting prior, check as to the timing of the excursion as sometimes unforeseen changes occur.*

6th Nov Craig Proctor. Shoreline Crabs.

8th Nov (Sat) Orchid, bird and crab walk at Orford.

4th Dec Andrew Hingston. Bumblebees.

7th Dec (Sun) Crabtree. A walk up through the head of Crabtree Valley.

January 1998 No General Activities

5th Feb Sue Baker. Maquarie Is. and Giant Petrels.

7th Feb (Sat) Field trip yet to be finalised. Further details in the January bulletin issue.

4th Mar AGM & Presidents Address

7th Mar (Sun) Field trip yet to be finalised. Further details in the January bulletin issue.

Other Activities

The following guided walks are conducted by the Hobart City Council for their Spring Bushcare Activities. Bookings are essential, phone Kerry Heatley at H.C.C 6238 2884

21st Nov (Fri) 8:30-10:00 PM Possum Prowl, Waterworks Reserve

26th Nov (Wed) 2:00-4:30 PM Waratahs and Organ Pipes, Wellington Park. A medium grade walk (some uphill walking required).

Subscriptions are due for the Calendar Year 1998

Adult \$20.00

Junior/Concession \$15.00

Family \$25.00

'The Tasmanian Naturalist' Subscription only (Aust) \$14.00

'The Tasmanian Naturalist' Subscription only (Library) \$25.00

'The Tasmanian Naturalist' Subscription only (Overseas) \$25.00

Membership also includes an annual subscription to the journal *The Tasmanian Naturalist*. A membership application form is also enclosed in this issue for any of your friends (might make a good Christmas present ☺).

The Peter Murrell Nature Reserve and Conservation Area

In August this year the Dept. of Environment and Land Management released the Interim Management Strategy (IMS) for the Peter Murrell Nature Reserve and Conservation Area. Most people are probably more familiar with the more common name of the Huntingfield and Coffee Creek area, which is situated behind the suburb of Blackmans Bay just south of the Antarctic Division. Some members of The Field Nats Club have been involved with the local landcare group, who have been lobbying for the area's protection. The reserve, which consists of a nature reserve and a conservation area, contains important forest, buttongrass and heathland communities. It holds over 200 native plants species, including 35 orchid species, two of which are rare in Tasmania. The area contains six poorly reserved plant communities and also supports several rare or threatened vertebrate and invertebrate species, including the 40-spotted pardalote, the eastern barred bandicoot, several moth species and a very rare scarab beetle.

Recreational management strategies have been devised to reduce the conflict between users (such as walkers, joggers, dog owners, horse riders, trail bike riders, naturalists and fishers) but to also protect the reserves' values. Other major management strategies include eradication or control of gorse and other weeds, rehabilitation of damage, elimination of dumping in the reserves and protection from wildfire in co-operation with local landowners, community groups and other authorities.

Of particular interest to naturalists, the IMS publication contains a list of all bird species, mammals, reptiles and orchids recorded in the reserve, as well as maps detailing vegetation communities, reserve and conservation area boundaries, and recreational use boundaries. The reserves will be managed by Parks and Wildlife Service officers of the South Central District based at Mt. Nelson.

Outing Report 10th Aug Mountain River Aquatic Invertebrates

Andrew Walsh

Eighteen people turned out for a great day of river sampling. As mentioned in Leon Barmuta's talk at

the meeting before the excursion, Mountain River (located north of Huonville), experienced a large, rare, 1 in 15 year mid-summer flood in 1993, dramatically changing the macroinvertebrate community structure at the time and for several months after. Armed with nets, buckets, trays and a field stereo-microscope, we visited three locations along the river to see what aquatic invertebrates we could find, and to investigate any changes along the river.

The phenomenon of longitudinal zonation of stream fauna is due to geomorphological changes along a stream. The upper reaches of streams are basically erosional whereas the lower reaches are depositional. Thus fauna in the upper reaches are less tolerant of high temperatures, require high concentrations of oxygen and frequently display marked adaptations to unidirectional flow. In the lower reaches, the fauna is characterised by being tolerant to higher water temperatures, lower oxygen and show no marked adaptations to unidirectional flow (Williams 1980).

Given the time constraints, and lack of expertise, we were generally unable to classify down to the species levels (see Table 1). We did notice, however, differences between the sites in terms of the biota. While some of this effect may have been due to a general reduction in the sampling intensity as lunchtime approached, there was marked differences in the river bed habitats at each site. For example, at the first site, where the river bed consisted mainly of cobbles and river sediments, Caddisfly larvae were generally of the form illustrated below, i.e. protected in tubular larval cases made from fine river gravel. At the second site, where some areas of still water occurred due to the position of the bedrock, specimens of the Caddisfly family Helicopsychidae were found, which many of us mistook for snails because of their helically arranged larval cases. At the third site, where water flowed quickly over the bedrock dominated river bed, Caddisfly larvae were found hidden inside bedrock crevices with no larval cases, but with web-like silken nets that filtered food from the water flowing downstream (i.e. a unidirectional flow adaptation).

Reference: Williams, W.D. 1980. Australian Freshwater Life. Published by The Macmillan Company of Aust. Pty Ltd.

Mountain River Sampling Sites

Site 1: Beneath bridge on Sawyers Creek Road (AMG Grid Ref 50872434)

Mainly cobble stones (ca. <30cm diameter) and sediment.

Site 2: Beneath bridge on Bennetts Road (AMG Grid Ref 5182459)

Mixture of cobble stones and bedrock and small areas of still water.

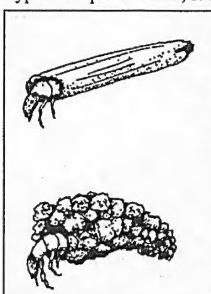
Site 3: Beneath Bridge at the end of Mountain River Road (AMG Grid Ref 51112479)

Mainly Bedrock and large boulders and cobbles (ca>30cm)

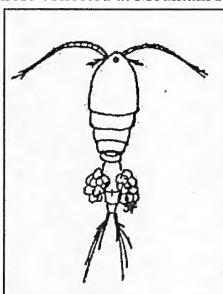
Table 1. Biota collected at Mountain River sampling sites.

| Site 1 | Site 2 | Site 3 |
|--------------------------------|--------------------------------|---------------------------|
| Larvae; | Larvae; | Larvae; |
| Trichoptera (Caddisflies) | Trichoptera (Caddisflies) | Trichoptera (Caddisflies) |
| Ephemeroptera (Mayflies) | Ephemeroptera (Mayflies) | Ephemeroptera (Mayflies) |
| Plectoptera (Stone Fly) | Plectoptera (Stone Fly) | Plectoptera (Stone Fly) |
| Coleoptera (Beetles) | Coleoptera (Beetles) | Chironomidae (Midge Fly) |
| | Chironomidae (Midge Fly) | Culicidae(Mosquito) |
| Adults; | Adults; | Adults; |
| Annelid (Worm) | Planaria (Flatworms) | Chironomidae (Midge Fly) |
| Ancylidae (Limpet) | Hydrobiidae (Freshwater Snail) | |
| Hydrobiidae (Freshwater Snail) | | |
| Cyclopoid Copepod | Cyclopoid Copepod | Cyclopoid Copepod |

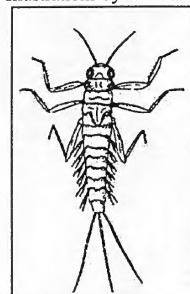
Types of aquatic fauna, similar to those collected at Mountain River. Illustrations by Janet Fenton.



Caddisfly larvae



Copepod



Mayfly nymph



Stonefly nymph.

Wanted: Dung or Alive!

The Australian Fungi Mapping Scheme have put a call out for dung! A new series of books is being written about Australian Fungi- the next one will be about fungi found on Australian dung. They require small collections of native herbivore dung (no carnivores' dung please) e.g. wallaby, wombat, bettong. The specimens need to be dried and should fill approximately two small film canisters.

To air dry your collection, place the dung on a dry paper towel or two, then into an open cardboard box. This can be put onto a high shelf and left for a week or two, or until the dung is very light and dry (it doesn't smell). Make sure the samples are clearly labelled and kept separate from one another. When dried, place them in a paper bag, folded at the top and stapled, together with an information label attached to the outside of the bag. The label should include the following;

NAME of the collector

DATE of collection

PLACE of collection

GRID REF Australian Map Grid reference (see Bob Mesibovs' article on map references in The Tasmanian Naturalist 1997)

ALTITUDE if known

HABITAT e.g. forest, farmland, roadside, walking track, sand dunes, etc.

HABITAT VEGETATION e.g. Eucalypts

DUNG FROM WHAT ANIMAL species name. If species name not known, use general description, e.g. bandicoot, possum etc.

SEND TO:

FUNGI MAP DUNG SURVEY

Dr Tom May

National Herbarium of Victoria

Birdwood Avenue, South Yarra, Vic 3141

Butterfly Name Changes

In a paper published in the recent Australian Journal of Entomology, Braby *et. al.* have produced a provisional list of common Australian butterfly names in an effort to standardise their common names. Scientific names can change due to differences in opinions between taxonomists or as new information becomes available, however common names, once established, need not change. Common names have the potential for stability regardless of taxonomic status. Braby *et. al.* emphasise that the list is not intended, at this stage, to form the definitive standard list of names and they hope all readers of their paper will comment on the suitability of the proposed names and make suggestions about those they feel unsuitable. They believe a stable set of good common names will be useful in promoting a wider interest in Lepidoptera, and that appropriate common names will be more acceptable in discussions and deliberations by local councils, political parties and other groups when dealing with conservation issues. Many of the changes affect Tasmanian butterfly names, so below is the species and common name list from the Butterflies of Tasmania book (McQuillan, 1994, published by the Tasmanian Field Naturalists Club) as well as the proposed common names suggested by Braby *et. al.*

Reference: Braby, M. F., Atkins, A. F., Dunn, K. L., Woodger, T. A., & Quick, W. N. B. 1997. A Provisional list of common names for Australian butterflies. *Australian Journal of Entomology*, Volume 36, Part 3.

| Species | Common name in Butterflies of Tasmania book | Common name suggested by Braby et al. |
|---------------------------------|--|--|
| <i>Trapezites lutea</i> | Rare White-spot Skipper | Yellow Ochre |
| <i>Anisynta dominula</i> | Dominula Skipper | Two-Brand Grass-skipper |
| <i>Pasma tasmanica</i> | Tasmanica Skipper | Two-spotted Grass-skipper |
| <i>Antipodia chaostola</i> | Chaostola Skipper | Heath Sand-skipper |
| <i>Hesperilla chrysotricha</i> | Chrysotricha Skipper | Golden-haired Sedge-skipper |
| <i>Hesperilla domnya</i> | Donnysa Skipper | Varied Sedge-skipper |
| <i>Hesperilla idothea</i> | Flame Skipper | Flame Sedge-skipper |
| <i>Hesperilla masteri</i> | Masters' Skipper | Chequered Sedge-skipper |
| <i>Oreisplanus munionga</i> | Marrawah Skipper | Alpine Sedge-skipper |
| <i>Taractrocera papryia</i> | White Grass-dart | White-banded Grass-dart |
| <i>Ocybadistes walkeri</i> | Yellow-banded Dart | Green Grass-dart |
| <i>Graphium macleayanum</i> | Macleays' Swallowtail | Macleays' Swallowtail |
| <i>Belenois java</i> | Caper White | Caper White |
| <i>Pieris rapae</i> | Cabbage White | Cabbage White |
| <i>Danaus plexippus</i> | Wanderer | Monarch |
| <i>Danaus chrysippus</i> | Lesser Wanderer | Lesser Wanderer |
| <i>Argynnis hobartia</i> | Hobart Brown | Tasmanian Brown |
| <i>Geitoneura klugii</i> | Klugs' Xenica | Marbled Xenica |
| <i>Heteronympha cordace</i> | Bright-eyed Brown | Bright-eyed Brown |
| <i>Heteronympha merope</i> | Common Brown | Common Brown |
| <i>Heteronympha penelope</i> | Shouldered Brown | Shouldered Brown |
| <i>Nesoxenica leprea</i> | Leprea Brown | Delicate Xenica |
| <i>Oreixenica lathoniella</i> | Common Silver Xenica | Silver Xenica |
| <i>Oreixenica orichora</i> | Orichora Brown | Spotted Alpine Xenica |
| <i>Oreixenica ptunarra</i> | Ptunarra Brown | Ptunarra Xenica |
| <i>Junonia villida</i> | Meadow Argus | Meadow Argus |
| <i>Vanessa itea</i> | Australian Admiral | Yellow Admiral |
| <i>Vanessa kershawi</i> | Australian Painted Lady | Australian Painted Lady |
| <i>Paralucia aurifera</i> | Bright Copper | Bright Copper |
| <i>Pseudalmenus chlorinda</i> | Tasmanian Hairstreak | Silky Hairstreak |
| <i>Candalides acastus</i> | Blotched Blue | Blotched Dusky-blue |
| <i>Neolucia agricola</i> | Fringed Blue | Fringed Heath-blue |
| <i>Neolucia hobartensis</i> | Mountain Blue | Montane Heath-blue |
| <i>Neolucia mathewi</i> | Mathews' Blue | Broom Heath-blue |
| <i>Theclinesthes serpentata</i> | Chequered Blue | Salt-bush Blue |
| <i>Lampides boeticus</i> | Pea Blue | Long-tailed Pea-blue |
| <i>Zizina labradus</i> | Common Grass-blue | Common Grass-blue |
| <i>Eurema smilax</i> | Small Grass-yellow | Small Grass-yellow |
| <i>Appias paulina ega</i> | Common Albatross | Yellow Albatross |